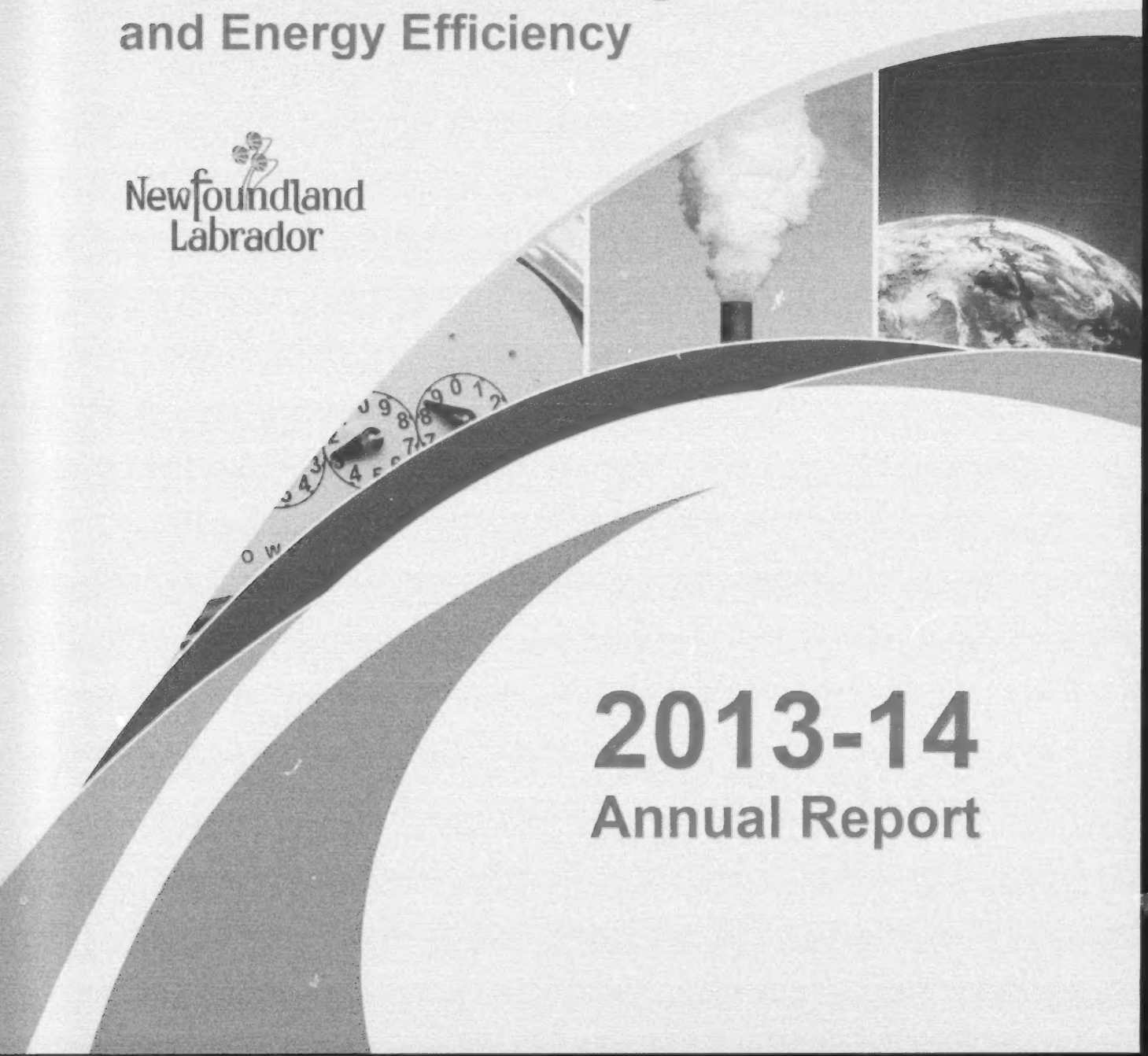
Office of Climate Change and Energy Efficiency

Newfoundland Labrador



2013-14 Annual Report

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Message from the Minister

In accordance with the Government of Newfoundland and Labrador's commitment to accountability, I am pleased to present the 2013-14 Annual Report for the Office of Climate Change and Energy Efficiency, which is an entity located within the Office of the Executive Council.

As a category two government entity, this report addresses the Office's activities and outputs from April 1, 2011 to March 31, 2014, which encompasses the complete reporting period of the Office's 2011-2014 Business Plan. As Minister, I am accountable for the results that are reported in this document.

The Government of Newfoundland and Labrador believes that climate change and energy efficiency are important long-term issues that present multiple opportunities and challenges for the province. Opportunities include the potential for a longer growing season for our agricultural sector as well as an ongoing impetus to realize the benefits associated with an increase in energy conservation and efficiency. At the same time, climate change presents several risks, such as more extreme weather and precipitation, and the province must increase its preparedness for these changes.

In August 2011, the Office established a strategic path forward for the province on these issues by releasing *Charting Our Course: Climate Change Action Plan* and *Moving Forward: Energy Efficiency Action Plan.* Together, these plans outline objectives and actions to increase the province's resilience to the impacts of climate change, improve the province's energy efficiency and reduce the province's greenhouse gas emissions. The Office is responsible for overseeing the implementation of these action plans. I am pleased to confirm that, as of March 31, 2014, 64 of the 75 actions outlined in the plans are completed or underway.

Looking forward, the Provincial Government remains committed to advancing action on these important issues, and ensuring our province is well placed to minimize the risks and maximize the opportunities associated with climate change.

Honourable Vaughn Granter
Minister Responsible for the Office of Climate Change and Energy Efficiency

1.0 Overview

The Government of Newfoundland and Labrador has committed to taking effective action on climate change and supporting a major shift in the uptake of energy efficiency. In 2009, the Provincial Government established the Office of Climate Change and Energy Efficiency (CCEE) to lead work on these key issues. The need for an office to lead on these issues was identified because:

- The issues are highly complex and cross-cutting. Climate change and energy efficiency affect all sectors of the economy, many government-funded bodies, and individuals throughout the province, meaning a strong horizontal approach is required.

- There is a need for high-level leadership. Evidence from around the world consistently demonstrates that top-down leadership is the only way to make real progress given the multifaceted and complicated nature of the issues.

- Economic and environmental concerns must be effectively balanced. The path forward must place equal weight on environmental sustainability and economic growth, and the interrelationships between these considerations are numerous and complex.

- Climate change requires a future-oriented approach. This is one of few policy areas where governments across the world have targets that span not just years, but decades. This requires a dedicated and sustained focus and strategic approach.

1.1 Vision

The vision of the Office of Climate Change and Energy Efficiency is of a province that achieves economic, social and environmental success by effectively integrating progressive action on climate change and energy efficiency.

1.2 Mandate

The mandate of the Office of Climate Change and Energy Efficiency is:

- To advance sustained action on climate change and energy efficiency that effectively balances economic and environmental considerations, including deepening public awareness, understanding and engagement.
- To undertake focused research and analysis to enable the province to maximize opportunities and minimize risks from the impacts of climate change and the move towards a lower-carbon global economy.
- To work with departments to better integrate climate change and energy efficiency considerations into their current and future programs, services, legislation and regulations, and ensure effective coordination across government.
- To advance the province's interests and priorities in regional, national and international forums on climate change and energy efficiency, and engage external stakeholders to deepen and widen government's dialogue on next steps.

To fulfill its mandate, CCEE is currently composed of eight staff members and is located on the 5th Floor, West Block, Confederation Building, St. John's. For the fiscal year 2013-14, CCEE had an operating budget of $1,054,400. For further details, please see Appendix B: Financial Statements.

1.3 Mission

By 2017, the Office of Climate Change and Energy Efficiency will have advanced the province's capacity to reduce greenhouse gas emissions, adapt to the impacts of climate change and improve energy efficiency.

The mission statement identifies the priority focus areas over two planning cycles. It represents the key longer-term results that CCEE will be working towards as it moves forward on the strategic directions of government (as outlined in Appendix A). A full mission statement, including measures and indicators, is contained in CCEE's 2014-17 Business Plan.

1.4 *Lines of Business*

The Office of Climate Change and Energy Efficiency has four lines of business:

Policy and Strategy Development: CCEE has lead responsibility within government for policy and strategy development on climate change and energy efficiency. This includes analyzing the implications of different policy approaches to achieve government's greenhouse gas reduction and energy efficiency targets and desired outcomes; improving understanding of the impacts of climate change and economic opportunities for the province; assessing the implications of national and international developments for the province; overseeing delivery of the 75 commitments in the climate change and energy efficiency actions plans owned by 13 different entities including CCEE (which is responsible for 17 commitments); and leading efforts to raise public awareness.[1]

Strengthening the Evidence Base: CCEE has lead responsibility within government for research, data and analysis on climate change and energy efficiency. For example, CCEE leads the development of provincial greenhouse gas projections; studies the impact of different carbon prices on the provincial economy; deepens understanding of how the province may be impacted by climate change and what can be done to improve resilience; and reviews economic and energy models to better understand the relationship between investments in energy efficiency, energy consumption and economic activity.

Promoting Government-Wide Action: CCEE provides specialist knowledge and expertise to strengthen departments' understanding of climate change and energy efficiency, and help them integrate these issues into their ongoing operations, programs, legislation, and regulations. CCEE aims to drive action across government and ensure that government takes a coordinated approach to the opportunities and challenges to help ensure resources are directed to where they will have the most impact.

Representing the Province in Intergovernmental Forums and Engaging External Stakeholders: CCEE represents the province's interests in regional, national and international forums on climate change and energy efficiency. CCEE has an extensive network of contacts in other jurisdictions which it actively engages to advance the province's policy objectives. CCEE also engages external stakeholders to help inform policy analysis and guide the implementation of commitments, including large industry, the electrical utilities, industry associations, academia, non-government organizations and other governments such as the Nunatsiavut Government.

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[1] The Government of Newfoundland and Labrador's 2011 Energy Efficiency Action Plan outlines 40 strategic commitments. These 40 commitments, along with 35 additional commitments, are also outlined in the Provincial Government's 2011 Climate Change Action Plan.

2.0 Shared Commitments

The Office's vision is of a province that achieves economic, social and environmental success by effectively integrating progressive action on climate change and energy efficiency. Achieving this vision requires adopting a collaborative approach, as both issues affect every sector of the economy. To ensure a collaborative approach is realized, the Office works to achieve progress across three key challenges:

1. **Adapting to climate change.** The Provincial Government has committed to enhancing the province's resilience to climate change. CCEE works with internal and external stakeholders to ensure the impacts of climate change are considered and adequately addressed in planning and decision making processes. As an example, CCEE participates in committees that are co-chaired by the Department of Fisheries and Aquaculture and Fisheries and Oceans Canada to ensure climate change is adequately considered in oceans management and sustainable development practices.

2. **Reducing energy consumption and greenhouse gases.** The Government of Newfoundland and Labrador has established targets to reduce the province's energy consumption by 20 per cent below business-as-usual by 2020 and to reduce the province's greenhouse gas emissions by 10 per cent below 1990 levels by 2020. Meeting these targets requires action across the entire economy. As an example, CCEE has worked with companies in key large industrial sectors to develop detailed technical reports on the costs and benefits of opportunities to reduce greenhouse gas emissions.

3. **Leading by example.** In the 2011 climate change and energy efficiency action plans, the Provincial Government committed to leading by example on climate change and energy efficiency. CCEE therefore works across government to support actions that will reduce energy consumption and greenhouse gas emissions in government's operations. As an example, CCEE worked with the Government Purchasing Agency in 2013-14 to develop a guide to support the procurement of environmentally preferable products by core government.

3.0 Highlights and Accomplishments

The last planning cycle marked a period of significant progress for the Office of Climate Change and Energy Efficiency. In August 2011, CCEE released *Charting Our Course: Climate Change Action Plan* and *Moving Forward: Energy Efficiency Action Plan*. As outlined previously, these plans established government's strategic approach for action on these issues. CCEE is responsible for collaborating with government departments and agencies to oversee and support implementation of the plans across government. As of March 2014, implementation of

the five-year plans reached a mid-way point and a review of progress indicated 64 of the 75 commitments were completed or underway.

In addition to its coordinating and supporting role, CCEE is directly responsible for implementing 17 of the 75 commitments outlined in these plans, all of which are completed or underway. As evidenced throughout Section 4.0 of this report, CCEE's accomplishments throughout 2011-14 support both the effective implementation of the climate change and energy efficiency action plans, as well as the goals and objectives outlined for CCEE in its 2011-14 Business Plan, which focus on climate change adaptation, as well as greenhouse gas reduction and energy efficiency.

Highlights during 2013-14 with respect to adaptation include the development and release of provincial and regional climate projections in June 2013, detailing how the province's climate is expected to change by mid-century. The findings were disseminated to key internal and external decision makers with the goal of improving planning and decision making processes to account for future changes in climate. To further enhance collaboration on this issue, CCEE also established an adaptation network in September 2013, which brings together representatives from nine Provincial Government departments and agencies, as well as representatives from Memorial University, community stakeholders and industry to share information and discuss broad policy-level priorities on climate change adaptation.

In terms of energy efficiency and greenhouse gas reduction, highlights for 2013-14 include the development and release of several tools and resources to facilitate action. This includes the release of a *Guide to Building Energy-Efficient Homes* in May 2013 and a *Guide to Implementing the Build Better Buildings Policy* in August 2013. It also includes work on a guide to promote green procurement, which will provide advice on purchasing environmentally preferable products and supports the strategic priorities of government, including reducing greenhouse gas emissions and improving energy efficiency.

Another significant accomplishment for CCEE in 2013-14 was the continued implementation of the *Turn Back the Tide* campaign, which was launched in September 2012 to raise awareness about climate change and energy efficiency in Newfoundland and Labrador. *Turn Back the Tide* is an integrated campaign with television, print and online components. At the heart of the campaign is a website that was designed to provide a 'one-stop shop' for information, tips and resources and is targeted at homeowners, businesses, and communities. The campaign received two Pinnacle Awards from the International Association of Business Communicators Newfoundland and Labrador based upon the campaign's innovative work in 2013, which is outlined under the reporting for Section 4.0.

4.0 Report on Performance

March 31, 2014 marked the end of the third and final year of CCEE's three-year business plan. The plan identified two strategic issues that guided CCEE's work over the 2011-14 period: (1) climate change adaptation and (2) energy efficiency and greenhouse gas reduction. This section reports on CCEE's performance for the 2013-14 objective for each of these issues, as well as the cumulative results towards achieving the goal for each issue over 2011-14.

Issue 1: Climate Change Adaptation

Rising global temperatures are causing climates around the world to change. The impacts of climate change are already being experienced in Newfoundland and Labrador, where, as of 2014, temperatures are 1.5°C higher than the historical average as calculated using Environment Canada historical climate data. These impacts have implications for every sector of the province's economy, and include more frequent and intense storm events as well as rising sea levels, which create vulnerabilities such as coastal erosion. Improving the province's ability to understand and adapt to these changes supports the Provincial Government's strategic direction of advancing action on climate change, as outlined in Appendix A.

The province's resilience to climate impacts can be significantly enhanced through the implementation of measures that will minimize risks, such as damages caused by flooding, and maximize opportunities, such as a longer agricultural growing season. This requires the completion of research to understand potential changes, the development of tools and resources to respond to these changes, and the integration of climate change adaptation into decision making through enhanced collaboration with internal and external stakeholders.

Reporting on Objective 1.3 (2013-14)

The following table provides an overview of initiatives undertaken by the Office of Climate Change and Energy Efficiency during 2013-14 to fulfill its objective of promoting the integration of climate change impacts in government's decision making in Newfoundland and Labrador.

Objective 1.3	By March 31, 2014, the Office will have promoted the integration of climate change impacts into government's decision making in Newfoundland and Labrador.
Measure: Promotion of the integration of climate change impacts into decision-making.	
Indicators (Planned for 2013-14):	**Results:**
Enhanced collaboration with key provincial departments and agencies on climate change, including developing tools and resources to help integrate climate change impacts into government planning and decision-making.	**Establishing a Provincial Adaptation Network** In September 2013, CCEE established a provincial adaptation network to promote collaboration and share best practices on issues relating to climate change adaptation in Newfoundland and Labrador, and to discuss priorities going forward. The network includes representatives from: • Department of Environment and Conservation • Department of Fisheries and Aquaculture • Department of Municipal and Intergovernmental Affairs • Department of Natural Resources • Department of Transportation and Works • Fire and Emergency Services • Forestry and Agrifoods Agency • Memorial University of Newfoundland • Municipalities Newfoundland and Labrador • Newfoundland and Labrador Environmental Industry Association • Newfoundland and Labrador Housing Corporation • Office of Climate Change and Energy Efficiency The impacts of climate change are also being more effectively integrated into the Provincial Government's decision-making processes, including by: • **Incorporating Climate Change into Land Use Decisions** - Through working with the Department of Environment and Conservation, a representative from CCEE was added to the Interdepartmental Land Use Committee in December 2013. This committee is responsible for the allocation of crown land. Through participation on this committee, CCEE is able to ensure that climate change impacts and adaptation are being effectively considered when crown land is allocated to an individual, organization or business.

Objective 1.3	By March 31, 2014, the Office will have promoted the integration of climate change impacts into government's decision making in Newfoundland and Labrador.
Measure: Promotion of the integration of climate change impacts into decision-making.	
Indicators (Planned for 2013-14):	**Results:**
	• **Integrating Climate Change into the Environmental Assessment Process** - In September 2013, CCEE began reviewing environmental assessments as part of the Provincial Government's existing process to ensure that climate change impacts and adaptation, as well as greenhouse gas reduction and energy efficiency, are being effectively considered as applications are reviewed. As evidenced throughout this report, a significant amount of CCEE's work requires effective collaboration with internal and external stakeholders and the development of tools and resources to facilitate action. Additional examples of this work are provided under the next indicator regarding the continued implementation of the Climate Change Action Plan. As examples, the climate projections study is a resource that was completed in partnership with researchers at Memorial University, and the province's climate monitoring capabilities are being enhanced through a joint data collection initiative by CCEE and the Department of Transportation and Works.
Continued implementation of the Climate Change Action Plan.	Of the 75 commitments in the Climate Change Action Plan, 18 relate to climate change adaptation. Throughout 2013-14, CCEE continued to oversee the implementation of the 2011 Climate Change Action Plan. As of March 2014, all 18 commitments relating to climate change adaptation were completed or underway. CCEE is directly responsible for implementing four commitments in the Climate Change Action Plan relating to climate change adaptation. Highlights of CCEE's work in 2013-14 towards implementing these commitments include: • **Releasing Climate Projections** - CCEE worked with researchers at Memorial University and the Department of Environment and Conservation to develop and release a study in June 2013 that outlines how the province's climate is expected to change by mid-century. The findings were disseminated to internal and external

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Measure: Promotion of the integration of climate change impacts into decision-making.	
Indicators (Planned for 2013-14):	**Results:**
	stakeholders to improve decision-making processes by accounting for future changes in climate. For example, the information is being rolled out to engineers in the private sector and in provincial and municipal governments to help inform building and infrastructure decisions. • **Enhancing Climate Monitoring** – By partnering with the Department of Transportation and Works, in 2013-14 CCEE spearheaded an initiative to collect data from the Road Weather Information System to help fill information gaps and monitor changes in climate over time. When fully compiled, the data will be published on the Community Accounts database. • **Supporting the Sustainable Communities Initiative** – In 2013-14, CCEE led engagement with the Nunatsiavut Government on the Sustainable Communities Initiative, including facilitating a $150,000 contribution from the Department of Environment and Conservation. This funding was used to develop risk assessments for housing in the north. Further information on this initiative is provided under the reporting for Goal 2. • **Establishing a Provincial Adaptation Network** – A provincial adaptation network was established by CCEE in September 2013 to bring together Provincial Government departments, industry, and representatives from the academic community to promote collaboration and share best practices on issues relating to climate change adaptation in Newfoundland and Labrador, and to discuss priorities going forward. More information on the Network is provided under the reporting for the previous indicator.

Reporting on the Goal 1 (2011-14)

The following table provides an overview of initiatives undertaken by the Office of Climate Change and Energy Efficiency during 2011-14 to fulfill its goal of advancing initiatives towards improving the province's preparedness and resilience to the impacts of climate change.

Goal 1	By 2014, the Office will have advanced initiatives towards improving the province's preparedness and resilience for the impacts of climate change.
Measure: Initiatives are developed and advanced.	
Indicators (Planned for 2011-14):	**Results:**
Released a Climate Change Action Plan.	In August 2011, *Charting our Course: Climate Change Action Plan* was released. A key goal of the plan is to enhance the province's resilience to the impacts of climate change. Under this goal, there are two objectives: 1) To strengthen the understanding of the impacts of climate change on the province 2) To improve the integration of climate change adaptation into decision making Of the 75 commitments in the Plan, 18 are targeted at achieving these objectives.
Supported the implementation of the Climate Change Action Plan.	A review of progress completed by CCEE shows that, as of March 2014, all 18 commitments in the Climate Change Action Plan regarding the issue of adaptation are completed or underway. Not only has CCEE directly implemented a number of commitments in the Climate Change Action Plan, as outlined under the reporting for Objective 1.3, it has also supported other departments and agencies in implementing the commitments for which they are responsible. For example, CCEE supported the Department of Environment and Conservation's Water Resources Division in the development of world-class flood risk maps and the continued implementation of a flood alert system, as well as the Department of Natural Resources' Geological Survey Division's work to monitor coastal erosion rates at 104 sites across the province.

Goal 1	By 2014, the Office will have advanced initiatives towards improving the province's preparedness and resilience for the impacts of climate change.
Measure: Initiatives are developed and advanced.	
Indicators (Planned for 2011-14):	**Results:**
Advanced initiatives to strengthen the understanding of the impacts of climate change on the province.	**Releasing Climate Projections** In June 2013, CCEE released climate projections that outline how Newfoundland and Labrador's climate is expected to change by mid-century. This study required working with researchers at Memorial University to create regional climate models by downscaling global climate models and, by using data from 19 weather stations throughout the province, projecting changes in several climate variables across the province, including changes in temperature, precipitation, the number of frost days, and extreme weather. **Enhancing Climate Monitoring** In 2011, CCEE commissioned a study about the province's climate monitoring capabilities, which highlighted areas that required improved data collection. In response, CCEE partnered with the Department of Finance to publish historical weather data from about 80 weather sites on the Community Accounts database, and is partnering with the Department of Transportation and Works to collect historical data from the Road Weather Information System, also for publication on Community Accounts. This information is helping to fill information gaps and allows for monitoring changes in climate over time. Once fully collected, all information will be made publicly available.
Enhanced collaboration with other levels of government, industry, communities and researchers on climate change impacts and adaptation.	**Participating in the Federal Adaptation Platform** The federal Adaptation Platform was launched in March 2012 to bring together representatives from across Canada to collaborate on priorities relating to climate change adaptation, including representatives from all provincial and territorial governments, 12 Federal Government departments and agencies, industry and professional organizations. In addition to the Plenary group, which is the coordinating body that oversees the Platform's work, CCEE participates in seven working groups under the Platform, which are: • Energy – Its objective is to advance adaptation and increase resilience to a changing climate in the electricity

Goal 1	By 2014, the Office will have advanced initiatives towards improving the province's preparedness and resilience for the impacts of climate change.
Measure: Initiatives are developed and advanced.	
Indicators (Planned for 2011-14):	**Results:**
	and oil and gas sectors. • Infrastructure and Buildings – Its objective is to build capacity, generate evidence and provide outreach to increase the capability of infrastructure managers, municipalities, builders, insurers, engineers and other relevant stakeholders to adapt to climate change. • Mining – Its objective is to address information gaps while developing tools and information that will help the sector to adapt. • Northern – Its objective is to provide northern decision makers with the information and tools necessary to advance adaptation. • Economics of Adaptation – Its objective is to create economic knowledge and tools that help decision makers in both the private and public sectors make better adaptation investment choices and policy decisions. • Measuring Progress – Its objective is to improve the ability of decision-makers to measure progress in the implementation and effectiveness of adaptation. • Regional Adaptation Collaborative (RAC) and Tools Synthesis –Its objective is to provide a forum through which value-added tools products can be identified and developed. Through participation in the various working groups under the Platform, CCEE is able to promote provincial interests and priorities, contribute to national case studies and research projects addressing matters of importance to the province, and develop improved understanding of common issues regarding climate change adaptation across Canada.

Goal 1	By 2014, the Office will have advanced initiatives towards improving the province's preparedness and resilience for the impacts of climate change.
Measure: Initiatives are developed and advanced.	
Indicators (Planned for 2011-14):	**Results:**
	Supporting the Sustainable Communities Initiative CCEE has actively supported the Nunatsiavut Government's Sustainable Communities Initiative since 2012. This initiative has undertaken research on key issues for communities in northern Labrador and continues to develop decision-making tools, such as hazard maps and vulnerability assessments. Between 2012 and 2014, CCEE led engagement the Nunatsiavut Government on the Sustainable Communities Initiative, including facilitating a $150,000 contribution from the Department of Environment and Conservation. In 2012-13, the funding was used to support a review of best practices in the design of energy-efficient and climate-adapted housing for northern regions, and to identify and review climate-sensitive environmental constraints on the sub-arctic built environment. A review of best practices for incorporating climate change adaption in community planning and infrastructure for northern regions was also completed. In 2013-14, the funding was used to support the development of a report by a multi-disciplinary team on the findings of their assessment of housing risks in Nain, Hopedale and Makkovik, which will inform the development of new climate-resistant building codes and standards. In addition, support was provided for hazard mapping and an assessment of wind and snow conditions in Hopedale. **Participating in Oceans Management Committees** CCEE has participated in two federal-provincial committees relating to oceans management since January 2013. These include the Canada – Newfoundland and Labrador Committee on Oceans Management and the Regional Oversight Committee on Oceans Management, both of which are co-chaired by the Province and the Federal Government. Through participation in these committees, CCEE ensures that issues relating to climate change are being effectively considered in oceans management policies and practices.

Goal 1	By 2014, the Office will have advanced initiatives towards improving the province's preparedness and resilience for the impacts of climate change.
Measure: Initiatives are developed and advanced.	
Indicators (Planned for 2011-14):	**Results:**
	Establishing a Provincial Adaptation Network A provincial adaptation network was established by CCEE in September 2013, which includes representation from Memorial University, the Newfoundland and Labrador Environmental Industry Association, Municipalities Newfoundland and Labrador, and nine Provincial Government departments, as outlined under the reporting for Objective 1.3.
Developed initiatives to strengthen public knowledge and awareness about climate change.	**Launching the *Turn Back the Tide* Campaign** The *Turn Back the Tide* campaign was launched by CCEE in September 2012 to raise awareness about the impacts of climate change in Newfoundland and Labrador, and possible solutions, such as improved energy efficiency. *Turn Back the Tide* is an integrated campaign with television, print and online components, along with a strong emphasis on the development of community partnerships, as outlined under the reporting for Goal 2. The centerpiece of the campaign is a website, which is a one-stop shop for authoritative information on climate change in the province. As of March 31, 2014, the campaign's website had received over 56,000 visits. The campaign has won awards for its effectiveness and impact. In 2014, the *Turn Back the Tide* campaign received two Pinnacle Awards from the International Association of Business Communicators, an award of merit and an award of excellence. Additionally, the St. John's IceCaps won an American Hockey League Award in June 2013 for an innovative partnership with *Turn Back the Tide* campaign, through which CCEE hosted in-game and online events to raise awareness and promote action on climate change. **Developing Presentations and Workshops** Developing and delivering presentations and workshops are important tools for improving stakeholders' understanding and awareness of climate change. From 2011 to 2014, CCEE organized numerous presentations and workshops. Examples include the development and delivery of:

Goal 1	By 2014, the Office will have advanced initiatives towards improving the province's preparedness and resilience for the impacts of climate change.
Measure: Initiatives are developed and advanced.	
Indicators (Planned for 2011-14):	**Results:**
	• A presentation to the Clarenville Rotary Club in December 2012 to highlight how climate change will impact the province and how businesses can prepare for these challenges and opportunities. • A presentation about how climate change is projected to impact our province's economic sectors at NEIA's Annual Conference in October 2014. • Presentations about climate change and how communities can take action during the Municipalities Newfoundland and Labrador symposium in May 2013 and convention in November 2013. • A workshop about taking action on climate change during the Provincial Student Leadership Conference in Gander during October 2013. • A webinar and an in-person presentation in December 2013 to provide information to stakeholders about climate projections and the implications of its findings for businesses and communities. • A presentation during Memorial University's Sustainable Tourism Conference about the implications of climate change for the tourism industry in February 2014.

Issue 2: Energy Efficiency and Greenhouse Gas Reduction

Climates around the world are changing due to the increasing quantities of greenhouse gases that are being sent into the earth's atmosphere as a result of human activities. These greenhouse gases include carbon dioxide released from the combustion of fossil fuels, such as oil and gasoline, and methane released as a result of agricultural activities and the decomposition of organic waste in landfills. Reducing emissions is key to preventing global temperatures from continuing to rise.

In Newfoundland and Labrador, according to 2012 data, 89 per cent of the province's total emissions result from the combustion of fossil fuels to generate energy for homes, buildings, vehicles and industry. Improving the province's energy efficiency is therefore an integral approach to reducing provincial greenhouse gas emissions. Improvements in energy efficiency also produce multiple other benefits, including lower utility bills for homeowners and reduced operating costs for businesses, which can improve their competitiveness.

Achieving greenhouse gas reductions and improvements in energy efficiency and conservation requires the effective balancing of economic and environmental issues. This entails strengthening the evidence and developing tools and resources to support decision-making. It also requires significant collaboration with internal and external stakeholders.

Reporting on Objective 2.3 (2013-14)

The following table provides an overview of initiatives undertaken by the Office of Climate Change and Energy Efficiency during 2013-14 to fulfill its objective of increasing the integration of energy efficiency and greenhouse gas reduction into government's decision making in Newfoundland and Labrador.

Objective 2.3	By March 31, 2014, the Office will have increased the integration of energy efficiency promotion and greenhouse gas emissions reduction into government's decision-making in Newfoundland and Labrador.
Measure: Increased integration of energy efficiency promotion and greenhouse gas emissions reduction into decision-making.	
Indicators (Planned for 2013-14):	**Results:**
Enhanced collaboration on energy efficiency and greenhouse gas mitigation, including developing tools and resources to integrate energy efficiency and greenhouse gas	**Promoting Green Procurement** In 2013-14, CCEE worked with the Government Purchasing Agency (GPA) and contracted Reeve Consulting to develop *Buying Green! A Guide for Purchasing Environmentally Friendly Products*. The guide was developed to promote a greater understanding of green procurement practices and how to incorporate environmental considerations into government's procurement decisions. It supports the Provincial Government's

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Measure: Increased integration of energy efficiency promotion and greenhouse gas emissions reduction into decision-making.	
Indicators (Planned for 2013-14):	**Results:**
considerations into government decision-making.	commitment its 2011 climate change and energy efficiency action plans to explore using its procurement power to, amongst other things, lower greenhouse gas emissions, promote greater energy efficiency and reduce waste. In 2013-14, CCEE and GPA ran four information sessions on the new guide, which were attended by over 100 internal and external stakeholders. Roll-out of the guide will continue over 2014-15. **Supporting Implementation of the Build Better Buildings Policy** CCEE released a *Guide to Implementing the Build Better Buildings Policy* in August 2013. This policy requires buildings that are owned or funded by the Provincial Government, such as schools, long term care facilities and municipal recreation facilities, to be constructed in a sustainable way and meet stringent energy efficiency requirements. The guide was developed to provide practical advice on meeting the requirements of this policy. In 2013-14, CCEE ran two training sessions on the guide, which were attended by over 50 people. **Establishing an Interdepartmental Greening Government Committee** In 2013-14, CCEE established an interdepartmental committee to lead the development of an action plan that will outline practical steps to green government going forward. Developing this action plan is a commitment in the 2011 climate change and energy efficiency action plans. The committee is chaired by CCEE and is comprised of representatives from the Department of Transportation and Works (TW), Multi-Materials Stewardship Board (MMSB), Human Resources Secretariat, Office of the Chief Information Officer and GPA. The action plan is anticipated to be released in 2014-15. To inform the *Greening Government Action Plan* the following activities were initiated by CCEE in 2013-14:

Objective 2.3	By March 31, 2014, the Office will have increased the integration of energy efficiency promotion and greenhouse gas emissions reduction into government's decision-making in Newfoundland and Labrador.
Measure: Increased integration of energy efficiency promotion and greenhouse gas emissions reduction into decision-making.	
Indicators (Planned for 2013-14):	**Results:**
	• **Waste Audits** – CCEE worked with the MMSB and TW to develop an inventory of buildings that government owns to identify a representative sample to include in waste audits. The first waste audit was conducted in March 2014 and further audits will be completed in 2014-15. These audits will provide valuable information on the amount and type of waste being generated by government. This work will inform initiatives to reduce waste under the *Greening Government Action Plan*. • **Provincial Government Carbon Footprint** – CCEE partnered with the Department of Finance to develop a carbon footprint for the Provincial Government. The Department of Finance led the analysis, which estimated the amount of greenhouse gas emissions that are produced as a result of energy combustion for government operations. The results were released in March 2014 and will inform the development of the *Greening Government Action Plan*. • **Employee Survey** – CCEE developed a survey in October 2013 to be administered to Provincial Government employees to develop an understanding of employees' knowledge of environmentally sustainable initiatives within the Provincial Government and attitudes towards green behaviours. The survey will be administered by the NL Statistics Agency in 2014-15. The results of this survey will inform activities taken to improve employee engagement under the *Greening Government Action Plan*.
Continued implementation of the Climate Change and Energy Efficiency Action Plans.	Throughout 2013-14, CCEE continued to oversee implementation of the 2011 climate change and energy efficiency action plans. CCEE is also directly responsible for implementing 11 commitments in the action plans relating to energy efficiency and greenhouse gas reduction. Highlights of CCEE's work in 2013-14 towards implementing these

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Measure: Increased integration of energy efficiency promotion and greenhouse gas emissions reduction into decision-making.	
Indicators (Planned for 2013-14):	**Results:**
	commitments include: • **Supporting Energy-Efficient Homes** – In May 2013, CCEE released a *Guide to Building Energy-Efficient Homes*. This guide provides practical information and advice to homeowners, builders and municipalities about the requirements added to the National Building Code in December 2012 concerning energy efficiency. • **Collaborating with the Federal Government** – Throughout 2013-14, CCEE participated in several federal-provincial working groups on energy efficiency and greenhouse gas reduction. These committees, such as the Steering Committee on Energy Efficiency (as outlined under the reporting for Goal 2), support multiple commitments made in the climate change and energy efficiency action plans to collaborate with the Federal Government. Amongst other things, these committees serve as a mechanism for the Provincial Government to provide input on matters such as the labeling for energy-efficient products and updates to national construction codes. • **Working to Reduce Emissions from Large Industry** – Engagement with the Federal Government continued throughout 2013-14, with the goal of developing an approach for reducing greenhouse gas emissions from the large industrial sector. Activities also included the completion of a study to examine greenhouse gas abatement opportunities in the oil refining sector, which was completed in partnership with North Atlantic Refining Limited in December 2013. • **Examining Energy Efficiency Requirements for Large Buildings** – In February 2014, CCEE finalized and publicly released a technical report that details the costs and benefits of adopting the National Energy Code for Buildings in Newfoundland and Labrador. A jurisdictional review of adoption and enforcement practices in other

Objective 2.3	By March 31, 2014, the Office will have increased the integration of energy efficiency promotion and greenhouse gas emissions reduction into government's decision-making in Newfoundland and Labrador.
Measure: Increased integration of energy efficiency promotion and greenhouse gas emissions reduction into decision-making.	
Indicators (Planned for 2013-14):	**Results:**
	provinces has also been completed, and stakeholder consultations are anticipated once further analysis has been completed in 2014-15. • **Implementing the *Turn Back the Tide* campaign** – CCEE continued to implement the *Turn Back the Tide* public awareness campaign on climate change and energy efficiency throughout 2013-14. Further information on the success of the campaign is provided under the reporting for Goal 2.

Reporting on Goal 2 (2011-14)

The following table provides an overview of initiatives undertaken by the Office of Climate Change and Energy Efficiency during 2011-14 to fulfill its goal of supporting actions to reduce greenhouse gas emissions and promote energy efficiency in Newfoundland and Labrador.

Goal 2	By 2014, the Office will have supported actions to reduce greenhouse gas emissions and promote energy efficiency in Newfoundland and Labrador.
Measure: Actions that reduce greenhouse gas emissions and promote energy efficiency are supported.	
Indicators (Planned for 2011-14):	**Results:**
Released a Climate Change Action Plan and an Energy Efficiency Action Plan.	In August 2011, CCEE released *Charting our Course: Climate Change Action Plan* and *Moving Forward: Energy Efficiency Action Plan.* Together, the plans contain 75 strategic commitments to promote economy-wide action on climate change and energy efficiency that are structured to be implemented over a five-year period. The action plans contain goals that specifically relate to these issues: • Reduce greenhouse gas emissions in Newfoundland and Labrador • Support a major shift in the uptake of energy efficiency • Demonstrate Provincial Government leadership on climate change and energy efficiency • Advance action on climate change and energy efficiency through collaboration with other jurisdictions Of the 75 commitments contained in the action plans, 57 relate specifically to achieving these goals (the remaining 18 refer to the goal related to climate change adaptation).
Supported the implementation of a Climate Change Action Plan and an Energy Efficiency Action Plan.	As of March 2014, 46 of the 57 commitments in the action plans relating to energy efficiency and greenhouse gas reduction were completed or underway. In addition to taking lead responsibility for a number of commitments in the climate change and energy efficiency action plans, as outlined under the 1 reported for Objective 2.3, CCEE has also supported other departments and agencies in implementing the commitments for which they are responsible. For example, CCEE has supported the Department of

Goal 2	By 2014, the Office will have supported actions to reduce greenhouse gas emissions and promote energy efficiency in Newfoundland and Labrador.
Measure: Actions that reduce greenhouse gas emissions and promote energy efficiency are supported.	
Indicators (Planned for 2011-14):	**Results:**
	Innovation, Business and Rural Development in its work to advance work associated with seizing opportunities to grow the province's green economy. CCEE also engages with external stakeholders to inform them about government's priorities as set out in the plans and raise awareness about the issues. For example: • A presentation to the Building Operators and Managers' annual national conference about climate change and buildings in September 2011. • A presentation to the Newfoundland and Labrador's Environmental Industry's Association about the green economy and government's efforts to raise consumers' awareness about climate change in October 2012. • A presentation to the Commonwealth Parliamentary Association about the challenges and opportunities associated with tackling climate change in November 2013 • A presentation to the Sustainable Tourism Conference about the implications of climate change for the tourism sector in the province in February 2014.
Improved the evidence base to support decision making and policy development, including updating GHG projections and monitored trends over time.	**Improving Greenhouse Gas Projections** In 2011, CCEE established a rigorous process for projecting the province's greenhouse gas emissions. These projections help inform strategies and other measures that are required going forward to advance progress toward meeting the province's 2020 target for reducing greenhouse gas emissions. Additionally, each year CCEE reviews the Federal Government's update on provincial greenhouse gas emissions, which allows for monitoring historical trends since 1990.

Goal 2	By 2014, the Office will have supported actions to reduce greenhouse gas emissions and promote energy efficiency in Newfoundland and Labrador.
Measure: Actions that reduce greenhouse gas emissions and promote energy efficiency are supported.	
Indicators (Planned for 2011-14):	**Results:**
	Identifying Opportunities to Reduce Emissions from Large Industry Throughout 2011 – 2014, CCEE identified opportunities and analyzed possible approaches for reducing greenhouse gas emissions from the province's large industrial sector. To date, this work has included completing three rounds of consultations with the large industrial sector, engaging the Federal Government and industry associations (such as the Canadian Association of Petroleum Producers and Canadian Fuels Association), and developing and releasing technical reports that analyze opportunities to reduce greenhouse gas emissions in the province's oil refining, offshore oil, and iron ore mining sectors. This work will inform decision making going forward.
Implemented a public awareness campaign designed to strengthen the public's understanding and awareness of the importance of energy efficiency and reducing greenhouse gases.	**Launching the *Turn Back the Tide* Campaign** The *Turn Back the Tide* campaign was launched by CCEE in September 2012 to raise awareness about climate change in Newfoundland and Labrador and possible solutions, such as improved energy efficiency. The campaign has television, print and online components. The centerpiece of the campaign is the *Turn Back the Tide* website, which received over 56,000 visits by March 31, 2014. The website is structured to provide information targeted at homeowners, businesses and communities on how they can take action to reduce their greenhouse gas emissions and improve their energy efficiency. The website includes an interactive house that provides tips for improving a home's energy efficiency, as well as carbon calculators for individuals and municipal government to understand their greenhouse gas emissions and how to reduce them. The campaign has also been expanding its reach and bringing its message to new audiences by establishing successful partnerships with community organizations. To date, the campaign has partnered with the Restaurant Association of Newfoundland and Labrador, the Community Youth Network, the Bonne Bay Marine Station, and the St. John's IceCaps.

Goal 2	By 2014, the Office will have supported actions to reduce greenhouse gas emissions and promote energy efficiency in Newfoundland and Labrador.
Measure: Actions that reduce greenhouse gas emissions and promote energy efficiency are supported.	
Indicators (Planned for 2011-14):	**Results:**
	The Municipal Government Carbon Calculator was launched by CCEE in May 2013, along with a challenge that invited municipal governments throughout Newfoundland and Labrador to submit proposals about how they could reduce their carbon footprints. Proposals were received from throughout the province and three municipalities were awarded $5,000 by the Department of Municipal and Intergovernmental Affairs to implement their ideas. Additionally, CCEE worked with Municipalities Newfoundland and Labrador in 2013 to incorporate the Municipal Government Carbon Calculator into the Tidy Towns Awards starting in 2014. This will help to further integrate environmental considerations into municipal governments' decision-making processes. The *Turn Back the Tide* campaign received two Pinnacle Awards from the International Association of Business Communicators Newfoundland and Labrador based upon the campaign's work throughout 2013, including an award of merit and an award of excellence. Additionally, the St. John's IceCaps won an American Hockey League Award in June 2013 for an innovative partnership with *Turn Back the Tide* campaign, through which CCEE hosted in-game and online events to raise awareness and promote action on climate change.
Represented the province's interests with the federal government and in intergovernmental meetings at the officials' level.	**International Climate Change Negotiations** CCEE represented Newfoundland and Labrador on the Canadian delegation to the United Nations Climate Change Conference from 2011 to 2014. Developing an approach to reducing global greenhouse gas emissions is a key focus of the negotiations, which provide a valuable opportunity to discuss shared challenges and best practices with other jurisdictions. In 2013-14, this work expanded to include engagement with the Federal Government with respect to Canada's international commitment to file a post-2020 greenhouse gas reduction target in 2015 (all countries made a similar commitment). **Steering Committee on Energy Efficiency**

Goal 2	By 2014, the Office will have supported actions to reduce greenhouse gas emissions and promote energy efficiency in Newfoundland and Labrador.
Measure: Actions that reduce greenhouse gas emissions and promote energy efficiency are supported.	
Indicators (Planned for 2011-14):	**Results:**
	In 2013-14, CCEE participated in the Federal Government's Steering Committee on Energy Efficiency. This committee is comprised of senior officials from federal, provincial and territorial governments across the country. CCEE participates in several targeted working groups under this committee, which are: • The Built Environment and Equipment Working Group - This group provides expert advice on standards and practices for energy-efficient homes, buildings and equipment. • The Transportation Working Group on Energy Efficiency - This group ensures the alignment of transportation energy efficiency activities across federal, provincial and territorial jurisdictions, and works to enhance collaboration on this issue. • The Industry Working Group on Energy Efficiency - This group promotes information sharing among industrial energy users, agencies, utilities and jurisdictions involved in the delivery of industrial energy efficiency programming in Canada. **New England Governors – Eastern Canadian Premiers** CCEE participated in the Climate Change Committee under the New England Governors and Eastern Canadian Premiers (NEG-ECP) conference in 2013-14. The focus of the committee is to identify regional strategies and initiatives to reduce greenhouse gas emissions and enhance work on adaptation. CCEE also participated in the Transportation and Air Quality Committee of the NEG-ECP in from 2011 to 14, which is focused on examining policies that can reduce greenhouse gas emissions, achieve improved air quality and enhance the effectiveness of the region's transportation systems.

5.0 Opportunities and Challenges

The complex and cross-cutting nature of climate change and energy efficiency presents multiple opportunities and challenges. There is no longer any debate that climate change is happening. Significant changes are being experienced around the world and the need for action has never been more evident. Public support for action has increased and the issue of energy efficiency and conservation is consistently receiving more attention. Markets are transforming as consumers are becoming increasingly aware of the benefits of energy efficiency. Additionally, the supply of energy-efficient products is growing as consumer demand is increasing and more stringent product standards are fostering innovation in the market.

CCEE works to create a strong foundation of information, tools and resources that will help drive action on these issues going forward. Planning and decision-making processes will continue to be improved through the mechanisms that have been established (and highlighted in this report) to foster collaboration. While climate change is creating significant impacts on the province, such as increased storm events and rising sea levels, it also presents multiple opportunities, such as a longer agricultural growing season. Looking forward, CCEE will continue working towards minimizing the risks and vulnerabilities associated with climate change, while maximizing the opportunities.

At the same time, a significant challenge remains as action on climate change and energy efficiency must effectively balance environmental, social and economic considerations. Since 1990, Newfoundland and Labrador's economy has grown by 64 per cent. Yet, over the same period, energy consumption in the province has grown by only 8 per cent and greenhouse gas emissions grew by less than 0.5 per cent. This was largely due to industrial restructuring across the economy. However, strong economic growth in the future will put upwards pressure on provincial energy consumption and emissions. As a result, further policies and measures will be required to meet the ambitious reduction targets the province has established for reducing greenhouse gas emissions and energy consumption.

Economic growth also presents opportunities for action on climate change and energy efficiency. The global green economy is estimated to be worth approximately US$5.2 trillion (Source: Globe, 2010). A 2011 study by Globe Advisors, which was commissioned by CCEE and the Department of Innovation, Business and Rural Development, identified nine sectors as presenting key opportunities for growth in the green economy in Newfoundland and Labrador, such as green energy supply and sustainable tourism. The study showed that the green economy employed about 10,300 in the province in 2011 and, with the right support, this number could grow by up to 30 per cent by 2020. Looking forward, CCEE will continue collaborating with internal and external stakeholders to ensure the province is well positioned to maximize such opportunities.

Appendix A: Strategic Directions

Strategic directions are the articulation of desired physical, social or economic outcomes that normally require action by more than one government entity. These directions are generally communicated by government through platform documents, Throne and Budget Speeches, policy documents and other communiqués. The Transparency and Accountability Act requires departments and public bodies to take into account these strategic directions in the preparation of their performance-based plans. This action will facilitate the integration of planning practices across government and will ensure that all entities are moving forward on key commitments.

The direction related to the Office of Climate Change and Energy Efficiency is provided below.

Title: **Climate Change and Energy Efficiency**

Outcome: A province that has advanced its capacity to reduce greenhouse gas emissions, adapt to the impacts of climate change and improve energy efficiency.

Components of Strategic Direction	This Direction is Addressed in entity's		
	Business Plan	Operational Plan	Work Plan
Released a Climate Change Action Plan and an Energy Efficiency Action Plan	X		
Advanced the province's ability to understand and adapt to climate change	X		
Supported the promotion of energy efficiency and the reductions of greenhouse gas emissions in Newfoundland and Labrador	X		

Appendix B: Financial Statements

Expenditure and revenue figures included in this document are un-audited and based on public information provided in the Report on the Program Expenditures and Revenues of the Consolidated Revenue Fund for the year ending March 31, 2014. Audited financial statements are a requirement at the government level and are made public through the Public Accounts process. CCEE is not required to submit a separate audited financial statement.

Item	2013-14 Budget	2013-14 Revised	2013-14 Actual
Salaries	736,000	705,300	707,554
Employee Benefits	2,400	2,900	2,971
Transportation and Communications	32,500	32,500	31,518
Supplies	5,500	5,500	5,843
Professional Services	260,000	299,500	287,238
Purchased Services	17,000	14,500	12,478
Property, Furnishings and Equipment	1,000	1,000	704
Total	**1,054,400**	**1,061,200**	**1,048,306**

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